

REMARKS

Election

Applicant hereby provisionally **elects Group V** (claims 9-16), drawn to, according to the Restriction Requirement, a DNA molecule, comprising a DNA region, which when transcribed yields a ParG inhibitory RNA molecule, a plant cell, plant or seeds comprising said DNA molecule and **SEQ ID NO: 3 with traverse**. Applicant respectfully submits that new claims 20-21 fall within the subject matter of Group V and thus should be examined. Applicant reserves the right to file divisional application(s) directed to non-elected subject matter.

Claim Amendments

Upon entry of the foregoing amendment, claims 1-16 and 20-21 are pending. Claims 2-5, 8, 10-11, and 16 have been amended. Claims 17-19 have been cancelled without prejudice or disclaimer to the subject matter therein. Claims 20-21 have been added. Support for the claim amendments can be found throughout the specification and in the claims as originally filed, for example, in the specification at ¶¶ 11-14 and 28. Applicant respectfully reserves the right to pursue the subject matter of cancelled claims in continuation and/or divisional applications. Applicant respectfully requests entry of these claim amendments and submits that they do not constitute new matter.

Traversal of Restriction Requirement

The Restriction Requirement required restriction to one of seven Groups I-VII, provided *infra*, which are purportedly distinct inventions under 35 U.S.C. § 121. The Restriction Requirement requires that Applicant elect one of the following seven (7) allegedly distinct inventions:

Group I, claims 1-2, and 6-7, drawn to a method of producing a plant tolerant to stress conditions using a chimeric gene comprising a DNA which when transcribed yields a ParG inhibitory molecule, wherein said ParG inhibitory molecule comprises a nucleotide sequence of ParG gene;

Group II, claims 1, 3 and 6-7, drawn to a method of producing a plant tolerant to stress conditions using a chimeric gene comprising a DNA which when transcribed yields a ParG inhibitory molecule, wherein said ParG inhibitory molecule

comprises a nucleotide sequence which is complementary to a nucleotide sequence of ParG gene;

Group III, claims 1, 4 and 6-7 drawn to a method of producing a plant tolerant to stress conditions using a chimeric gene comprising a DNA which when transcribed yields a ParG inhibitory molecule, wherein said ParG inhibitory molecule comprises a DNA encoding a self-splicing ribozyme;

Group IV, claims 1 and 5-8, drawn to a method producing a plant tolerant to stress conditions using a chimeric gene comprising a DNA which when transcribed yields a ParG inhibitory molecule, wherein said ParG inhibitory molecule comprises a nucleotide sequence which is in sense/direct or antisense/inverted orientation compared to promoter;

Group V, claims 9-16, drawn to a DNA molecule, comprising a DNA region, which when transcribed yields a ParG inhibitory RNA molecule, a plant cell, plant or seeds comprising said DNA molecule;

Group VI, claims 17 and 19, drawn to a method of producing a plant tolerant to stress conditions or a stress tolerant plant comprising a mutation in an endogenous ParG gene; and

Group VII, claim 18, drawn to a method of producing a plant tolerant to stress conditions, comprising selecting a plant which is resistant to ParG inhibitor.

Applicant respectfully requests reconsideration of the Restriction Requirement in view of the following remarks.

The Restriction Requirement alleges that the inventions listed as Groups I-VII do not relate to a single general inventive concept under PCT Rule 13.1 because under PCT Rule 13.2, they lack the same or corresponding special technical features.

The Restriction Requirement asserts that the technical feature of Groups I-VII appears to be a nucleotide sequence encoding a ParG inhibitory molecule. The Restriction Requirement states that U.S. Patent No. 6,395,543 ("the '543 patent") describes a nucleotide sequence which when transcribed yields a ParG inhibitory molecule, such as an antisense sequence of a ParG coding sequence and thus concludes the special technical feature linking Groups I-VII does not constitute a special technical feature under PCT Rule 13.2.

Applicant respectfully disagrees.

The special technical feature of the invention is a DNA comprising a nucleotide sequence encoding a ParG inhibitory molecule and an operably linked plant-expressible promoter such that the DNA can be used in the claimed methods to produce plants tolerant to stress conditions.

The '543 patent does not teach this special technical feature. Indeed, the '543 patent is silent on DNA constructs encoding ParG inhibitory RNA molecules under control of an operably linked plant-expressible promoter, let alone that such DNA constructs could be used to producing stress-tolerant plants. Rather, the '543 patent is primarily concerned with the identification and analysis of nucleic acid molecules encoding ParG from mammalian origin, such as bovine, murine, or human origin and the use thereof in host cells, such as "human, rattus, bovine, insect, yeast or bacteria." See Col. 2, lines 32-35; Col. 3, lines 46-47. Accordingly, because the '543 patent does not teach the special technical feature of the invention, Applicant submits that there is no lack of unity and Groups I-VII should be examined together.

In the event that the Examiner does not withdraw the Restriction Requirement in its entirety, Applicant requests that the Restriction Requirement be modified so that Groups I, II, III, IV, and V be rejoined. Applicant respectfully submits that the DNA molecule of Group V is used to make the plant tolerant to stress conditions of Groups I, II, III, and IV. As such, Groups I-V all share the same special technical feature and there is no lack of unity between these Groups

Alternatively, Applicant respectfully requests that the Restriction Requirement be modified such that claim 4 be included in both Groups I and II. Applicant submits that claim 4 requires a self-splicing ribozyme between the parG inhibitory RNA molecule (either sense or antisense) and the 3' end region, resulting in aberrant unpolyadenylated parG inhibitory sense or antisense RNA molecules with enhanced efficiency. Accordingly, Applicant submits that claim 4 belongs in both Group I and II.

Similarly, Applicant requests that the Restriction Requirement be modified to the extent that Groups I and IV be rejoined. Applicant submit that the claims of Group IV which require the simultaneous presence of antisense and sense ParG nucleotide sequences, can be regarded as an embodiment of the sense claims of Group I, further requiring the presence of antisense nucleotide sequences complementary to the sense regions as required by the claimed embodiments of Group I. To emphasize this relationship, claim 5 depends from claim 2, rather than claim. Rejoinder of at least Group I and Group IV is respectfully requested.

Applicant also respectfully traverses the requirement for an election of a single sequence from the group of SEQ ID NO: 3, 4, 15, and 23, or SEQ ID NO: 1, 2, and 16. The Restriction Requirement asserts that the sequences, “normally constitute different inventive concepts,” but does not provide any reasons for this conclusion. Applicant notes that the nucleic acid and amino acid sequences all relate to the ParG gene. For example, the amino acid sequences share similar functions and common structural features. Accordingly, Applicant requests that SEQ ID NO: 1, 2, 3, 4, 15, 16, and 23 all be examined together.

In the event that the Examiner does not withdraw the restriction between the sequences, Applicant respectfully submits that SEQ ID NO: 1 and SEQ ID NO: 3 are both derived from *Arabidopsis thaliana*; SEQ ID NO: 2 and SEQ ID NO: 4 are both derived from *Solanum tuberosum*; and SEQ ID NO: 15 and SEQ ID NO: 16 are both derived from *Oryza sativa*. See specification at page 22-23. Accordingly, Applicant respectfully requests that the Restriction Requirement be modified such that SEQ ID NO: 1 and SEQ ID NO: 3 be examined together; SEQ ID NO: 2 and SEQ ID NO: 4 be examined together; and SEQ ID NO: 15 and SEQ ID NO: 16 be examined together.

In light of the above, Applicant respectfully requests that the restriction requirement be withdrawn and that all claims be prosecuted in the same patent application. In the event the requirement is made final, and in order to comply with 37 C.F.R. § 1.143, Applicant reaffirm the election **with traverse** of **Group V** (claims 9-16 and 20-21) and the election **with traverse** of **SEQ ID NO: 3** holding claims 1-8 in abeyance under the provisions of 37 C.F.R. § 1.142(b) until final disposition of the elected claims.

CONCLUSION


Applicant maintains that the restriction requirement is improper and that all pending claims, *i.e.*, claims 1-16 and 20-21, should be examined. If the Examiner believes that prosecution might be advanced by discussing the application with Applicant's representatives, in person or over the telephone, Applicant welcomes the opportunity to do so.

Respectfully submitted,

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Dated: April 5, 2007

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